Benevento Sand & Stone Corporation

Form 6
Annual Reporting Form

United States Environmental Protection Agency
Washington, DC 20460

Annual Reporting Form

A. GENERAL INFORMATION

1. Facility Name: Benevento Sand & Stone Corporation
2. NPDES Permit Tracking No.: MAR05D012
3. Facility Physical Address:
   a. Street: 900 Salem Street
   b. City: Wilmington c. State: MA d. Zip Code: 02914
4. Lead Inspector's Name: William Title: Schneider
Additional Inspector's Name(s): Ronald Mack, Frank Postma
5. Contact Person: William Schneider Title: Operations Manager
Phone: 978-658-5300 Ext. 122 E-mail: bschneider@beneventocompanies.com
6. Inspection Date: 1-21-2015. Report is for calendar year 2012

B. GENERAL INSPECTION FINDINGS

1. As part of this comprehensive site inspection, did you inspect all potential pollutant sources, including areas where industrial activity may be exposed to stormwater?
☒YES ☐NO
If NO, describe why not:

NOTE: Complete Section C of this form for each industrial activity area inspected and included in your SWPPP or as newly identified in B.2 or B.3 below where pollutants may be exposed to stormwater

2. Did this inspection identify any stormwater or non-stormwater outfalls not previously identified in your SWPPP? ☐YES ☒NO

If YES, for each location, describe the sources of these stormwater and non-stormwater discharges and any associated control measures in place:

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3. Did this inspection identify any sources of stormwater or non-stormwater discharges not previously identified in your SWPPP? ☐ YES ☒ NO

If YES, describe these sources of stormwater or non-stormwater pollutants expected to be present in these discharges, and any control measures in place:

4. Did you review stormwater monitoring data as part of this inspection to identify potential pollutant hot spots?
☒ YES ☐ NO ☐ NA, no monitoring performed
If YES, summarize the findings of that review and describe any additional inspection activities resulting from this review:
Iron and TSS were detected in excess of applicable benchmarks or the average of the previous 4 quarters exceeded benchmarks at DSN 002, DSN 003, 004, and 005. Nitrates were detected in excess of applicable benchmarks or the average of the previous 4 quarters exceeded benchmarks at DSN 001 and 005.

In short, nitrates are the main contaminant of concern in the northern portion of the facility and iron/TSS are the contaminants of conern in the southern portion of the site.

5. Describe any evidence of pollutants entering the drainage system or discharging to surface waters. and the condition of and around outfalls, including flow dissipation measures to prevent scouring:
At times during 2013, discharging stormwater appeared cloudy or opaque with TSS (primarily white quarry silt, sand, or organic matter). No sheens were observed on discharging water

6. Have you taken or do you plan to take any corrective actions, as specified in Part 3 of the permit, since your last annual report submission (or since you received authorization to discharge under this permit if this is your first annual report), including any corrective actions identified as a result of this annual comprehensive site inspection?
☒ YES ☐ NO

If YES, how many conditions requiring review for correction action as specified in Parts 3.1 and 3.2 were addressed by these corrective actions?
Treatment options for Nitrate removal were evaluated this year through evaluation of a vector control plan , housekeeping for spent explosive materials, and DSN 001 treatment research and study (in the form of constructed wetlands or anaerobic bioreactor)

To remove TSS from stormwater in the southern portion of the site, design options were evaluated for swale improvements.Upgrades evaluated included cleaning and grading riprap swales, adding check dams, adding inlet regulators to the cocnrete structures, flocculants, and adding berms to direct flow from roadways.

Two stormwater management basins and a sediment forebay were designed to upgrade DSN 005. Permitting began in November 2011 and continued through 2012.

See attached corrective action reports.

NOTE: *Complete the attached Corrective Action Form (Section D) for each condition identified, including any conditions identified as a result of this comprehensive stormwater inspection.*

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C. INDUSTRIAL ACTIVITY AREA SPECIFIC FINDINGS
Complete one block for each industrial activity* area *where pollutants may be exposed to stormwater. Copy this page for additional Industrial activity areas.

In reviewing each area, you should consider:

- Industrial materials, residue, or trash that may have or could come into contact with stormwater;
- Leaks or spills from industrial equipment, drums, tanks, and other containers;
- Offsite tracking of industrial or waste materials from areas of no exposure to exposed areas; and
- Tracking or blowing of raw, final, or waste materials from areas of no exposure to exposed areas

INDUSTRIAL ACTIVITY AREA Mine/Quarry:

1. Brief Description
   Blasting of ledge, loading and hauling blasted stone

2. Are any control measures in need of maintenance or repair? ☐ YES ☒ NO
3. Have any control measures failed and require replacement? ☐ YES ☒ NO
4. Are any additional/revised control measures necessary in this area? ☐ YES ☒ NO

   If YES to any of these three questions, provide a description of the problem: (Any necessary corrective actions should be described on the attached Corrective Action Form)
   Nitrates control BMP was implemented for control of spent blasting housing within the quarry. Spent materials are to be removed from runoff areas immediately after use.

INDUSTRIAL ACTIVITY AREA Stone Processing Plant:

1. Brief Description
   Crush stone and wash stone

2. Are any control measures in need of maintenance or repair? ☒ YES ☐ NO
3. Have any control measures failed and require replacement? ☐ YES ☒ NO
4. Are any additional/revised control measures necessary in this area? ☐ YES ☒ NO

   If YES to any of these three questions, provide a description of the problem: (Any necessary corrective actions should be described on the attached Corrective Action Form)
   Swales not effective at removing silt form stormwater. Swale upgrades are being evaluated.

INDUSTRIAL ACTIVITY AREA Raw Materials Storage Area:

1. Brief Description
   Stockpiling of raw materials (sands and gravels)

2. Are any control measures in need of maintenance or repair? ☐ YES ☒ NO
3. Have any control measures failed and require replacement? ☐ YES ☒ NO
4. Are any additional/revised control measures necessary in this area? ☐ YES ☒ NO

   If YES to any of these three questions, provide a description of the problem: (Any necessary corrective actions should be described on the attached Corrective Action Form)

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NOTE: Copy this page and attach additional pages as necessary

INDUSTRIAL ACTIVITY AREA RAP recycling area:

1. Brief Description
   Storage of broken asphalt and concrete

2. Are any control measures in need of maintenance or repair? ☐ YES ☒ NO
3. Have any control measures failed and require replacement? ☐ YES ☒ NO
4. Are any additional/revised control measures necessary in this area? ☐ YES ☒ NO

   If YES to any of these three questions, provide a description of the problem: (Any necessary corrective actions should be described on the attached Corrective Action Form)

INDUSTRIAL ACTIVITY AREA HMA Plant:

1. Brief Description
   hot mix asphalt plant with burner, asphalt ASTs, and raw aggreate feed

2. Are any control measures in need of maintenance or repair? ☐ YES ☒ NO
3. Have any control measures failed and require replacement? ☐ YES ☒ NO
4. Are any additional/revised control measures necessary in this area? ☐ YES ☒ NO

   If YES to any of these three questions, provide a description of the problem: (Any necessary corrective actions should be described on the attached Corrective Action Form)

INDUSTRIAL ACTIVITY AREA RMC plant:

1. Brief Description
   ready mix concrete plant stores raw aggregate, mixes cement and loads trucks

2. Are any control measures in need of maintenance or repair? ☐ YES ☒ NO
3. Have any control measures failed and require replacement? ☐ YES ☒ NO
4. Are any additional/revised control measures necessary in this area? ☐ YES ☒ NO

   If YES to any of these three questions, provide a description of the problem: (Any necessary corrective actions should be described on the attached Corrective Action Form)

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D. CORRECTIVE ACTIONS

Complete this page for each specific condition requiring a corrective action or a review determining that no corrective action is needed. Copy this page for additional corrective actions or reviews.

Include both corrective actions that have been initiated or completed since the last annual report, and future corrective actions needed to address problems identified In this comprehensive stormwater inspection. Include an update on any outstanding corrective actions that had not been completed at the time of your previous annual report.

1. Corrective Action # 1of 3 for this reporting period.
2. Is this corrective action:
   ☒ An update on a corrective action from a previous annual report; or
   ☐A new corrective action?
3. Identify the condition(s) triggering the need for this review:
   ☐Unauthorized release or discharge
   ☐Numeric effluent limitation exceedance
   ☐Control measures inadequate to meet applicable water quality standards
   ☐Change in facility operations necessitated change in control measures
   ☒ Average benchmark value exceedance
   ☐Other (describe):
4. Briefly describe the nature of the problem identified:
   Nitrate in DSN 001 and 005 discharges

5. Date of problem identified: 2011-2012
6. How problem was identified:
   ☐Comprehensive site inspection
   ☐ Quarterly visual assessment
   ☐Routine facility inspection
   ☒ Benchmark monitoring
   ☐Notification by EPA or State or local authorities
   ☐Other (describe): Observation of canadian geese and gulls implemented in late 2012.

7. Description of corrective action(s) taken or to be taken to eliminate or further investigate the problem (e.g., describe modifications or repairs to control measures, analyses to be conducted, etc.) or if no modifications are needed, basis for that determination: Observation of birds near discharge locations spurred development of a vector management plan, for which implementation begun in 2012. BMPs for housekeeping with spent explosives in the quarry were also studied and operational controls implemented in late 2012.

8. Did/will this corrective action require modification of your SWPPP? ☐ YES ☒ NO
9. Date corrective action initiated: 2012, ongoing
10. Date Correction action completed: Ongoing studies for effective nitrate removal.
11. If corrective action not yet completed, provide the status of corrective action at the time of the comprehensive site inspection and describe any remaining steps (including timeframes associated with each step) necessary to complete corrective action:

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D. CORRECTIVE ACTIONS

Complete this page for each specific condition requiring a corrective action or a review determining that no corrective action is needed. Copy this page for additional corrective actions or reviews.

Include both corrective actions that have been initiated or completed since the last annual report, and future corrective actions needed to address problems identified In this comprehensive stormwater inspection. Include an update on any outstanding corrective actions that had not been completed at the time of your previous annual report.

1. Corrective Action # 2of 3 for this reporting period.
2. Is this corrective action:
   ☐ An update on a corrective action from a previous annual report; or
   ☒ A new corrective action?
3. Identify the condition(s) triggering the need for this review:
   ☐Unauthorized release or discharge
   ☐Numeric effluent limitation exceedance
   ☐Control measures inadequate to meet applicable water quality standards
   ☐Change in facility operations necessitated change in control measures
   ☒ Average benchmark value exceedance
   ☐Other (describe):
4. Briefly describe the nature of the problem identified:
   TSS in DSN 005 discharge
5. Date of problem identified: 2011
6. How problem was identified:
   ☐Comprehensive site inspection
   ☐ Quarterly visual assessment
   ☐Routine facility inspection
   ☒ Benchmark monitoring
   ☐Notification by EPA or State or local authorities
   ☐Other (describe):
7. Description of corrective action(s) taken or to be taken to eliminate or further investigate the problem (e.g., describe modifications or repairs to control measures, analyses to be conducted, etc.) or if no modifications are needed, basis for that determination: Stormwater detention basins and sediment forebay designed and permitting begun in November 2011. Throughout 2012, additional applications, responses, revisions, and correspondence were completed to aid in permitting
8. Did/will this corrective action require modification of your SWPPP? ☐ YES ☒ NO
9. Date corrective action: 2011
10. Date Correction action completed or planned to be complete: ongoing permitting, construction in 2013, dependent on permits
11. If corrective action not yet completed, provide the status of corrective action at the time of the comprehensive site inspection and describe any remaining steps (including timeframes associated with each step) necessary to complete corrective action:

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D. CORRECTIVE ACTIONS

Complete this page for each specific condition requiring a corrective action or a review determining that no corrective action is needed. Copy this page for additional corrective actions or reviews.

Include both corrective actions that have been initiated or completed since the last annual report, and future corrective actions needed to address problems identified In this comprehensive stormwater inspection. Include an update on any outstanding corrective actions that had not been completed at the time of your previous annual report.

12. Corrective Action # 3of 3 for this reporting period.
13. Is this corrective action:
    ☐ An update on a corrective action from a previous annual report; or
    ☒A new corrective action?
14. Identify the condition(s) triggering the need for this review:
    ☐Unauthorized release or discharge
    ☐Numeric effluent limitation exceedance
    ☐Control measures inadequate to meet applicable water quality standards
    ☐Change in facility operations necessitated change in control measures
    ☒ Average benchmark value exceedance
    ☐Other (describe):
15. Briefly describe the nature of the problem identified:
    TSS in DSN 002, 003, and 004 discharge

16. Date of problem identified: 2011
17. How problem was identified:
    ☐Comprehensive site inspection
    ☒ Quarterly visual assessment
    ☐Routine facility inspection
    ☒ Benchmark monitoring
    ☐Notification by EPA or State or local authorities
    ☐Other (describe):
18. Description of corrective action(s) taken or to be taken to eliminate or further investigate the problem (e.g., describe modifications or repairs to control measures, analyses to be conducted, etc.) or if no modifications are needed, basis for that determination:
    Swales, inlet structures being evaluated for effectiveness at removal of TSS and iron in DSN 002, 003, and 004. Design phase initiated

19. Did/will this corrective action require modification of your SWPPP? ☒ YES ☐NO
20. Date corrective action: Ongoing 2012
21. Date Correction action completed or planned to be complete: upgrades/construction complete by winter 2013
22. If corrective action not yet completed, provide the status of corrective action at the time of the comprehensive site inspection and describe any remaining steps (including timeframes associated with each step) necessary to complete corrective action:
    ongoing maintenance to maintain effectivness of berms and swales at removing TSS and iron from stormwater in the southern portion of the site.

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E. ANNUAL REPORT CERTIFICATION

1. Compliance Certification

   Do you certify that your annual inspection has met the requirements of Part 4.2 of the permit, and that, based upon the results of this inspection, to the best of your knowledge, you are in compliance with the permit? ☒ YES ☐NO

   If NO, summarize why you are not in compliance with the permit:

2. Annual Report Certification
   I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Authorized Representative: William Schneider Title: Operations Manager

Printed Name:

Signature: Date Signed:

Attachment A

14 Day Corrective Action Reports

EA Engineering, Science, and Technology, Inc.

2374 Post Road, Suite 102
Warwick, Rhode Island 02886
Telephone: 401-736-3440
Fax: 401-736-3423
www.eaest.com

15 May 2012

TECHNICAL MEMORANDUM

TO: Charles Benevento
William Schneider

LOCATION: Benevento Sand & Stone Corp.

FROM: Frank Postma, LSP, PG

LOCATION: EA Engineering, Science, and Technology, Inc.

SUBJECT: Discovery of Condition Requiring Review to Determine if Modifications are Necessary – Corrective Action Report
Benevento Sand and Gravel
900 Salem Street, Wilmington, Massachusetts
EA Project No. 14882.01

Benevento Sand and Stone Corp., located at 900 Salem Street in Wilmington, Massachusetts, is subject to stormwater monitoring associated with the industrial activities as defined in the U.S. Environmental Protection Agency (EPA) Multi-Sector General Permit (MSGP) Sector D, Asphalt Paving Materials; MSGP Sector E, Ready-Mixed Concrete (RMC) Plant; and MSGP Sector J, Non-Metallic Mineral Mining and Dressing.

This technical memorandum is being issued to satisfy the requirements of Section 3.4 of the MSGP pertaining to Corrective Action Reports. Please find herein the required information that must be documented within 14 days of discovery:

1. *Identification of the condition triggering the need for corrective action review:*

   Section 3.2 of the MSGP, Conditions Requiring Review to Determine if Modifications are Necessary, indicates that if the average of four quarterly sampling results exceed an applicable benchmark or the results are such that an exceedance of the four quarter average is mathematically certain.

2. *Description of the problem identified:*

   As shown on the attached table, nitrate plus nitrite – nitrogen has been identified in excess of the applicable benchmark for four quarters at location DSN 001. The average of four quarters sampling results for iron and total suspended solids exceed the applicable benchmarks at locations DSN 003, DSN 004, and DSN 005.

3. *Date the problem was identified:*

   The laboratory certificate of analysis was received from the laboratory on 2 May 2012. Stormwater samples were collected from each of the five stormwater discharge locations on 22 through 23 April 2012 in accordance with the Stormwater Pollution and Prevention Plan (SWPPP) for the facility. The sampling was conducted to fulfill the 1st quarter 2012 stormwater sampling requirements. The results of the 22 through 23 April 2012 stormwater sampling are tabulated below:

4. *Summary of corrective action to be taken:*

   The following corrective actions will be taken at the site:

   - A stormwater management basin will be constructed along the haul road in the area of DSN 005. The basin will capture sediments in stormwater runoff from upgradient areas before they discharge into Martin's Brook. The proposed stormwater management basin consists of a swale, forebay, and two retention basins that are designed to trap fine particulates and other sediments during most storms.

   - A vector management plan is being prepared to control vectors at the site. Vectors have been determined to be a likely cause of the elevated concentrations of nitrate plus nitrite – nitrogen in stormwater at the site.

   - An evaluation of the engineering feasibility for the reconstruction of the water quality swales is currently being undertaken.

5. *Notice whether SWPPP modifications are required as a result of this discovery or corrective action:*

   The SWPPP and SWPPP worksheets will be updated with the revised BMPs.

6. *Date corrective action initiated:*

   The stormwater management basin is currently being permitted prior to installation. A Notice of Intent, pursuant to the Massachusetts Wetlands Protection Act Regulations, 310 CMR 10.00, was submitted to the Wilmington Conservation Commission in November 2011.

7. *Date corrective action completed or expected to be completed:*

   The corrective actions are expected to be completed by 1 August 2012.

This technical memorandum will be submitted as an attachment to the MSGP Annual Report.

ATTACHMENT A

STORMWATER SAMPLING SUMMARY
BENEVENTO SAND & STONE CORP.

Table 1
Stormwater Monitoring Analytical Data
Benevento Sand Gravel
900 Salem Street, Wilmington, MA

Analyte	Benchmark Concentration	DSN 001									DSN 002										DSN 003									
		6/22/2011		9/29/2011		10/19/2011		4/22/2012		Average	6/22/2011		9/29/2011		10/19/2011		4/22/2012		Average		6/22/2011		9/29/2011		10/19/2011		4/23/2012		Average	
Dissolved Oxygen (mg/L)		4.28		NA		NA		NA		4.28	3.96		NA		NA		NA		3.96		NS		NA		NA		NA		NA	
Iron (mg/L)	1.0	NA		NA		NA		NA		NA	**2.3**		**2.41**		0.400		0.347		1.35		NS		**57.9**		**8.88**		**48.1**		33.39	
Total Suspended Solids (mg/L)	100	**616**		5	U	5	U	44		167.5	66		21		5	U	5		24.3		NS		**1140**		59		**704**		599.5	
Nitrate (mg/L)	0.68	**1.22**		**5.27**		**5.03**		**7.71**		4.81	NA		NA		NA		NA		NA		NS		NA		NA		NA		NA	
Nitrite (mg/L)	(Combined)	**0.026**		**0.012**		**0.010**	U	**0.399**	H	0.112	NA		NA		NA		NA		NA		NS		NA		NA		NA		NA	
Fecal Coliform (MPN/100 mL)		1600		NA		NA		NA		1600	30		NA		NA		NA		30		NS		NA		NA		NA		NA	
E. Coli (CFU/100 mL)		NA		710		NA		NA		710	NA		44000		NA		NA		44000		NS		600		NA		NA		600	
pH (S.U.)	6.0 - 9.0	6.96		NA		NA		7.31		7.14	NA		NA		NA		NA		NA		NS		NA		NA		NA		NA	

Notes:
NS: Not sampled on given date
NA: Sample not analyzed for given analyte
Benchmark Monitoring Concentration per SWPPP (Earthworks Engineering, June 2010)
Data Validation Flags:
U: Analyte not detected above laboratory detection limit
H: Estimated value

Table 1
Stormwater Monitoring Analytical Data
Benevento Sand Gravel
900 Salem Street, Wilmington, MA

Analyte	Benchmark Concentration	DSN 004									DSN 005									
		6/22/2011		9/29/2011		10/19/2011		4/22/2012		Average	6/22/2011		9/29/2011		10/19/2011		4/22/2012		Average	
Dissolved Oxygen (mg/L)		5.05		NA		NA		NA		5.05	5.39		NA		NA		NA		5.39	
Iron (mg/L)	1.0	**1.03**		**10.7**		0.619		**38.9**		12.81	NA		**27.5**		**105**		**24.7**		52.40	
Total Suspended Solids (mg/L)	100	8		**165**		7		**252**		108	**1110**		**5870**		**345**		**424**		1937.3	
Nitrate (mg/L)	0.68	NA		NA		NA		NA		NA	**0.777**		0.209		0.562		**2.76**		1.08	
Nitrite (mg/L)	(Combined)	NA		NA		NA		NA		NA	**0.065**		0.042		0.069		**0.097**	H	0.068	
Fecal Coliform (MPN/100 mL)		110		NA		NA		NA		110	>=1600		NA		NA		NA		>=1600	
E. Coli (CFU/100 mL)		NA		1		NA		NA		1	NA		136		NA		NA		136	
pH (S.U.)	6.0 - 9.0	NA		NA		NA		NA		NA	**9.29**		NA		NA		8.11		8.70	

Notes:
NS: Not sampled on given date
NA: Sample not analyzed for given analyte
Benchmark Monitoring Concentration per SWPPP (Earthworks Engineering, June 201(
Data Validation Flags:
U: Analyte not detected above laboratory detection limit
H: Estimated value

EA Engineering, Science, and Technology, Inc.

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Warwick, Rhode Island 02886
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19 October 2012

TECHNICAL MEMORANDUM

TO: Charles Benevento
William Schneider

LOCATION: Benevento Sand & Stone Corp.

FROM: Frank Postma, LSP, PG

LOCATION: EA Engineering, Science, and Technology, Inc.

SUBJECT: Discovery of Condition Requiring Review to Determine if Modifications are Necessary – Corrective Action Report
Benevento Sand and Gravel
900 Salem Street, Wilmington, Massachusetts
EA Project No. 14882.01

Benevento Sand and Stone Corp., located at 900 Salem Street in Wilmington, Massachusetts, is subject to stormwater monitoring associated with the industrial activities as defined in the U.S. Environmental Protection Agency (EPA) Multi-Sector General Permit (MSGP) Sector D, Asphalt Paving Materials; MSGP Sector E, Ready-Mixed Concrete (RMC) Plant; and MSGP Sector J, Non-Metallic Mineral Mining and Dressing.

This technical memorandum is being issued to satisfy the requirements of Section 3.4 of the MSGP pertaining to Corrective Action Reports. Please find herein the required information that must be documented within 14 days of discovery:

1. *Identification of the condition triggering the need for corrective action review:*

   Section 3.2 of the MSGP, Conditions Requiring Review to Determine if Modifications are Necessary, indicates that if the average of four quarterly sampling results exceed an applicable benchmark or the results are such that an exceedance of the four quarter average is mathematically certain.

2. *Description of the problem identified:*

   As shown on the attached table, nitrate plus nitrite – nitrogen has been identified in excess of the applicable benchmark for four quarters at location DSN 001. The average of four quarters sampling results for iron exceeds the applicable benchmarks at locations DSN 002 and DSN 003. The average of four quarters sampling results for total suspended solids exceeds the applicable benchmarks at locations DSN 002 and DSN 005.

3. *Date the problem was identified:*

   The laboratory certificate of analysis was received from the laboratory on 26 September 2012. Stormwater samples were collected from each of the five stormwater discharge locations on 19 September 2012 in accordance with the Stormwater Pollution and Prevention Plan (SWPPP) for the facility. The sampling was conducted to fulfill the 3rd quarter 2012 stormwater sampling requirements. The results of the 19 September 2012 stormwater sampling are tabulated below:

4. *Summary of corrective action to be taken:*

   The following corrective actions will be taken at the site:

   - A stormwater management basin will be constructed along the haul road in the area of DSN 005. The basin will capture sediments in stormwater runoff from upgradient areas before they discharge into Martin's Brook. The proposed stormwater management basin consists of a swale, forebay, and two retention basins that are designed to trap fine particulates and other sediments during most storms.

   - Treatment options for removal of nitrate at DSN 001 are being evaluated. Options under consideration include constructed wetlands and an anaerobic bioreactor.

5. *Notice whether SWPPP modifications are required as a result of this discovery or corrective action:*

   The SWPPP and SWPPP worksheets will be updated with the revised BMPs.

6. *Date corrective action initiated:*

   The stormwater management basin is currently being permitted prior to installation. A Notice of Intent, pursuant to the Massachusetts Wetlands Protection Act Regulations, 310 CMR 10.00, was submitted to the Wilmington Conservation Commission in November 2011.

7. *Date corrective action completed or expected to be completed:*

   The corrective actions are expected to be completed by 1 February 2013.

This technical memorandum will be submitted as an attachment to the MSGP Annual Report.

ATTACHMENT A

STORMWATER SAMPLING SUMMARY
BENEVENTO SAND & STONE CORP.

Table 1.
Stormwater Monitoring Analytical Data
Benevento Sand Stone
900 Salem Street, Wilmington, Massachusetts

Location	Date	Iron (mg/L)		Total Suspended Solids (mg/L)		Nitrate (mg/L)		Nitrite (mg/L)		pH (S.U.)		E. Coli (CFU/100 mL)	
Benchmark Concentrations		**1**		**100**		**0.68 (combined)**				**6.0 - 9.0**		**NS**	
DSN 001	6/22/2011	NA		616		1.22		0.026		6.96		NA	
	9/29/2011	NA		5	U	5.27		0.012		NA		710	
	10/19/2011	NA		5	U	5.03		0.010	U	NA		NA	
	4/22/2012	NA		44		7.71		0.399	H	7.31		NA	
	6/2/2012	NA		90		6.72		0.010	H	6.98		NA	
	9/19/2012	NA		34		5.04		0.010	U	7.07		32000	
	4 Quarter Average	NA		43		6.13		0.107		7.12		32000	
DSN 002	6/22/2011	2.3		66		NA		NA		NA		NA	
	9/29/2011	2.41		21		NA		NA		NA		44000	
	10/19/2011	0.400		5	U	NA		NA		NA		NA	
	4/22/2012	0.347		5		NA		NA		NA		NA	
	6/2/2012	1.17		34		NA		NA		NA		NA	
	9/19/2012	20.0		646		NA		NA		NA		41000	
	4 Quarter Average	5.5		173		NA		NA		NA		41000	
DSN 003	6/22/2011	no discharge		no discharge		NA		NA		NA		NS	
	9/29/2011	57.9		1140		NA		NA		NA		600	
	10/19/2011	8.88		59		NA		NA		NA		NA	
	4/23/2012	48.1		704		NA		NA		NA		NA	
	6/2/2012	2.12		14		NA		NA		NA		NA	
	9/19/2012	17.5		160		NA		NA		NA		300	
	4 Quarter Average	9.5		78		NA		NA		NA		300	
DSN 004	6/22/2011	1.03		8		NA		NA		NA		NA	
	9/29/2011	10.7		165		NA		NA		NA		1	
	10/19/2011	0.619		7		NA		NA		NA		NA	
	4/22/2012	38.9		252		NA		NA		NA		NA	
	6/2/2012	0.519		6		NA		NA		NA		NA	
	9/19/2012	32.8		670		NA		NA		NA		230	
	4 Quarter Average	0.6		7		NA		NA		NA		230	
DSN 005	6/22/2011	NA		1110		0.777		0.065		9.29		NA	
	9/29/2011	27.5		5870		0.209		0.042		NA		136	
	10/19/2011	105		345		0.562		0.069		NA		NA	
	4/22/2012	24.7		424		2.76		0.097	H	8.11		NA	
	6/2/2012	NA		644		2.38		0.224	H	8.79		NA	
	9/19/2012	NA		1160		0.393		0.010	U	8.64		17000	
	4 Quarter Average	NA		345		0.562		0.069		8.51		17000	

NOTES:
Benchmark Monitoring Concentration per SWPPP (Earthworks Engineering, June 2010)
NS: No Benchmark Monitoring Concentration
Shading indicates exceedance of Benchmark Monitoring Concentration
NA: Sample not analyzed for given analyte (per SWPPP)
Data Validation Flags:
U: Analyte not detected above laboratory detection limit
H: Estimated value

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11 January 2013

TECHNICAL MEMORANDUM

TO: Charles Benevento
William Schneider

Anatoly Darov, P.E., Esq.

LOCATION: Benevento Sand & Stone

Burns & Levinson LLP

FROM: Frank Postma, LSP, LEP, PG

LOCATION: EA Engineering, Science, and Technology, Inc.

SUBJECT: Discovery of Condition Requiring Review to Determine if Modifications are Necessary – Corrective Action Report
Benevento Sand and Gravel
900 Salem Street, Wilmington, Massachusetts
EA Project No. 14882.01

Benevento Sand and Stone Corp., located at 900 Salem Street in Wilmington, Massachusetts, is subject to stormwater monitoring associated with the industrial activities as defined in the U.S. Environmental Protection Agency (EPA) Multi-Sector General Permit (MSGP) Sector D, Asphalt Paving Materials; MSGP Sector E, Ready-Mixed Concrete (RMC) Plant; and MSGP Sector J, Non-Metallic Mineral Mining and Dressing.

This technical memorandum is being issued to satisfy the requirements of Section 3.4 of the MSGP pertaining to Corrective Action Reports. Please find herein the required information that must be documented within 14 days of discovery:

1. *Identification of the condition triggering the need for corrective action review:*

   Section 3.2 of the MSGP, Conditions Requiring Review to Determine if Modifications are Necessary, indicates that if the average of four quarterly sampling results exceed an applicable benchmark or the results are such that an exceedance of the four quarter average is mathematically certain.

2. *Description of the problem identified:*

   As shown on the attached table, nitrate plus nitrite – nitrogen has been identified in excess of the applicable benchmark for four quarters at location DSN 001. Iron and total suspended solids have each been detected in excess of applicable benchmarks for four quarters at locations DSN 003 and DSN 005, respectively. The average of four quarters sampling results for iron and total suspended solids exceed the applicable benchmarks at locations DSN 002 and DSN 004. The average of four quarters sampling results for total

suspended solids exceeds the applicable benchmark for DSN 003. The average of four quarters sampling results for iron and nitrate plus nitrite – nitrogen exceeds the applicable benchmark for DSN 005.

3. *Date the problem was identified:*

   The laboratory certificate of analysis was received from the laboratory on 3 January 2013. Stormwater samples were collected from each of the five stormwater discharge locations on 21 December 2012 in accordance with the Stormwater Pollution and Prevention Plan (SWPPP) for the facility. The sampling was conducted to fulfill the 4th quarter 2012 stormwater sampling requirements. The results of the 21 December 2012 stormwater sampling are tabulated in the attached table.

4. *Summary of corrective action to be taken:*

   The following corrective actions will be taken at the site:

   - A stormwater management basin will be constructed along the haul road in the area of DSN 005. The basin will capture sediments in stormwater runoff from upgradient areas before they discharge into Martin's Brook. The proposed stormwater management basin consists of a swale, forebay, and two retention basins that are designed to trap fine particulates and other sediments during most storms. Design is currently under regulatory review and a spring 2013 construction schedule is anticipated.

   - Treatment options for removal of nitrate at DSN 001 are being evaluated. Options under consideration include constructed wetlands and an anaerobic bioreactor.

   - Operational controls on the disposal of spent explosive containers has been implemented.

5. *Notice whether SWPPP modifications are required as a result of this discovery or corrective action:*

   The SWPPP and SWPPP worksheets will be updated with the revised BMPs.

6. *Date corrective action initiated:*

   The stormwater management basin is currently being permitted prior to installation. A Notice of Intent, pursuant to the Massachusetts Wetlands Protection Act Regulations, 310 CMR 10.00, was submitted to the Wilmington Conservation Commission in November 2011.

7. *Date corrective action completed or expected to be completed:*

   The corrective actions are expected to be completed by 1 May 2013.

This technical memorandum will be submitted as an attachment to the MSGP Annual Report.

ATTACHMENT A

STORMWATER SAMPLING SUMMARY
BENEVENTO SAND & STONE CORP.

Table 1.
Stormwater Monitoring Analytical Data
Benevento Sand Stone
900 Salem Street, Wilmington, Massachusetts

Location	Date	Iron (mg/L)		Total Suspended Solids (mg/L)		Nitrate (mg/L)		Nitrite (mg/L)		pH (S.U.)		E. Coli (CFU/100 mL)	
Benchmark Concentrations		**1**		**100**		**0.68 (combined)**				**6.0 - 9.0**		**NS**	
DSN 001	4/22/2012	NA		44		7.71		0.399	H	7.31		NA	
	6/2/2012	NA		90		6.72		0.010	H	6.98		NA	
	9/19/2012	NA		34		5.04		0.010	U	7.07		32000	
	12/21/2012	NA		19		10.60		0.160		7.46		NA	
	4 Qtr Average	NA		47		7.52		0.145		7.21		NA	
DSN 002	4/22/2012	0.347		5		NA		NA		NA		NA	
	6/2/2012	1.17		34		NA		NA		NA		NA	
	9/19/2012	20.0		646		NA		NA		NA		41000	
	12/21/2012	1.4	B	10		NA		NA		NA		NA	
	4 Qtr Average	5.7		174		NA		NA		NA		NA	
DSN 003	4/23/2012	48.1		704		NA		NA		NA		NA	
	6/2/2012	2.12		14		NA		NA		NA		NA	
	9/19/2012	17.5		160		NA		NA		NA		300	
	12/21/2012	12.2	B	89		NA		NA		NA		NA	
	4 Qtr Average	20.0		242		NA		NA		NA		NA	
DSN 004	4/22/2012	38.9		252		NA		NA		NA		NA	
	6/2/2012	0.519		6		NA		NA		NA		NA	
	9/19/2012	32.8		670		NA		NA		NA		230	
	12/21/2012	13.4	B	202		NA		NA		NA		NA	
	4 Qtr Average	21.4		283		NA		NA		NA		NA	
DSN 005	4/22/2012	24.7		424		2.76		0.097	H	8.11		NA	
	6/2/2012	NA		644		2.38		0.224	H	8.79		NA	
	9/19/2012	NA		1160		0.393		0.01	U	8.64		17000	
	12/21/2012	NA		14500		4.93		0.4		9.93		NA	
	4 Qtr Average	NA		4182		2.62		0.183		8.87		NA	

NOTES:
Benchmark Monitoring Concentration per SWPPP (Earthworks Engineering, June 2010)
NS: No Benchmark Monitoring Concentration
Shading indicates exceedance of Benchmark Monitoring Concentration
NA: Sample not analyzed for given analyte (per SWPPP)
Data Validation Flags:
U: Analyte not detected above laboratory detection limit
H: Estimated value
B: Analyte present in Method Blank